Claims

1. Low viscosity, hot-melt stable adhesive composition, comprising:

a) at least one block copolymer, comprising at least two terminal poly(vinyl aromatic) blocks and at least one central block of randomly copolymerised isoprene/butadiene mixtures in an isoprene/butadiene weight ratio of from 45/55 to 55/45, having a poly(vinyl aromatic) content in the range of from 17 to 20 %, a total apparent molecular weight in the range of from 180,000 to 190,000, a content of 1,2-vinyl bonds and/or 3,4 vinyl bonds of at most 15 wt% in the conjugated diene blocks , and a coupling efficiency in the range of from 63-80 %, and occurring in a weight proportion of from 40 to 45 wt%, relative to the weight of the complete composition,

b) an aliphatic/aromatic hydrocarbon tackifying resin, containing less than 16 % by weight of aromatic structure as determined by H-NMR, a differential scanning calorimetry (DSC) glass transition temperature (Tg) between 30 and 55°C, and a Ring and Ball softening point between 85 and 95°C, in a weight proportion of from 45 to 55 wt%, relative to the weight of the complete composition,

c) a plasticizer, in a weight proportion of from 5 to 15 wt%, relative to the weight of the complete composition;

and having a stable hot-melt viscosity of plus or minus 5 % of the starting value after 24 hours at 177°C and having a hot-melt viscosity of ≤ 80 Pa.s at 177 °C.

2. Low viscosity, hot-melt stable adhesive composition according to claim 1, wherein the block copolymer component (a) is a S-(I/B)-S block copolymer, wherein S represents a block of polymerised substantially pure styrene and (I/B) represents a randomly copolymerised isoprene/butadiene block , and wherein the Poly Styrene Content is in the range of from 17 to 20 wt%.
3. Low viscosity, hot-melt stable adhesive composition according to claim 2, wherein the component (a) block copolymer has an apparent total molecular weight of from 180,000 to 185,000, an isoprene/butadiene weight ratio in the range of from 45/55 to 55/45, and a content of 1,2-vinyl bonds and/or 3,4-vinyl bonds, each in a proportion of from 5 to 10 wt% in the conjugated diene blocks.
4. Low viscosity, hot-melt stable adhesive composition according to claim 1, wherein the component (b) has an H-NMR aromatic structure in the range of from 4 to 10 wt%.
5. Low viscosity, hot-melt stable adhesive compositions according to claim 1, wherein the component (c) is a mineral oil.
6. Adhesive tapes and labels, comprising a composition according to claims 1-5 on a carrier.
7. Packaging tapes, comprising a composition according to claims 1-5 on a carrier.
8. Block copolymers to be used in the low viscosity, hot-melt stable adhesive composition according to claims 1-5, characterized in that they comprise at

least two terminal poly(vinyl aromatic) blocks and at least one central block of randomly copolymerised isoprene/butadiene mixtures in an isoprene/butadiene weight ratio of from 45/55 to 55/45, having a poly(vinyl aromatic) content in the range of from 17 to 20 %, a total apparent molecular weight in the range of from 180,000 to 190,000, a content of 1,2-vinyl bonds and/or 3,4 vinyl bonds, each in a proportion of at most 15 wt% in the conjugated diene blocks , and a coupling efficiency in the range of from 63-87 %.

9. Block copolymers according to claim 8, characterized in that they have the structure S-(I/B)-S, wherein S represents a block of polymerised substantially pure styrene and (I/B) represents a randomly copolymerised isoprene/butadiene block.

10. Block copolymers according to claims 8 and 9, characterized in that they have an apparent total molecular weight of from 180,000 to 185,000, an isoprene/butadiene weight ratio in the range of from 45/55 to 55/45 and a content of 1,2-vinyl bonds and/or 3,4-vinyl bonds, each in a proportion of from 5 to 10 wt% in the conjugated diene blocks.